

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/068272
Filing Date	February 6, 2002
First Named Inventor	Krasutsky, Pavel
Group Art Unit	1716
Examiner Name	Unknown

Sheet 1 of 3

Attorney Docket No: 1339.017US3

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US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
W	US-3,826,433	07/30/1974	Erickson, J. R., et al	241	14	06/01/1973
	US-4,732,708	03/22/1988	Ekman, R., et al	260	413	02/20/1986
	US-5,468,888	11/21/1995	Bouboutou, R., et al	554	58	05/12/1994
	US-5,529,769	06/25/1996	Cho, S. H., et al	424	74	12/20/1994
	US-5,577,671	11/26/1996	Seppanen, V	241	14	06/08/1993
	US-5,658,947	08/19/1997	DasGupta, T. K., et al	514	510	03/21/1995
	US-5,679,828	10/21/1997	Lee, K., et al	560	116	06/05/1995
	US-5,750,709	05/12/1998	Castor, T. P.	546	348	01/31/1995
	US-5,804,575	09/08/1998	Pezzuto, J. M., et al	514	169	03/27/1997
	US-6,260,777	07/17/2002	Seppanen, V.	241	19	11/01/1996

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
W	WO-97/16590	05/09/1997	Seppanen, V.	D21B	1/00	

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
W		"Betulinic acid found to have strong anticancer activity", 1 p.	
W		CORDEIRO, N., et al., "Cork suberin as a new source of chemicals 1. Isolation and chemical characterization of its composition", <u>International Journal of Biological Macromolecules</u> , 22, (1998), pp. 71-80	
		ECKERMAN, C., et al., "Comparison of Solvents for Extraction and Crystallisation of Betulinol from Birch Bark Waste", <u>Paperi ja Puu - Papper och Tra</u> , Vol. 67, No. 3 (abstract), (1985), p.100	
		EKMAN, R., "The Suberin Monomers and Triterpenoids from the Outer Bark of Betula verrucosa Ehrh", <u>Holzforschung</u> , 37, Including English Translation, (1983), pp. 205-211	
		FUCHINO, HIROYUKI, et al., "Chemical Evaluation of Betula species in Japan. II. Constituents of Betula platyphylla var.japonica", <u>Chemical & Pharmaceutical Bulletin (Tokyo)</u> , 44 (5), (1996), pp. 1033-1038	
		FUJIOKA, TOSHIHIRO, "Anti-AIDS Agents, 11. Betulinic acid and platanic acid as anti-HIV principles from Syzigium claviflorum and the anti-HIV activity of structurally related triterpenoids", <u>Journal of Natural Products</u> , 57 (2), (Feb. 1994), pp. 243-247	
		FULDA, S., et al., "Betulinic acid triggers CD95 (APO-1/Fas)- and p53-independent apoptosis via activation of caspases in neuroectodermal tumors", <u>Cancer Research</u> , 57 (21), (Nov. 1, 1997), pp. 4956-4964	
		GELES, I.S., "Bark as Fuel", <u>Bumazh, Prom.</u> , No. 4, ABSTRACT, (April 1986), pp.	

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DATE CONSIDERED

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	21-22	JAASKELAINEN, P., "Betulinol and its utilisation", <u>Paperi Ja Puu - Papper Och Tra</u> , 63 (10), (Oct. 1981), pp. 599-603	JAN 21 2003 TECH CENTER 1600/2000
		KOLATTUKUDY, P.E., "Structure, Biosynthesis, and Biodegradation of Cutin and Suberin", <u>Annual Review of Plant Physiology</u> , 32, (1981), pp. 539-567	
		LAKS, P.E., et al., "Flavonoid Biocides: Wood Preservatives Based on Condensed Tannins", <u>Holzforschung</u> , 42, (1988), pp. 299-306	
		LUGEMWA, F.N., et al., "A Heliothis zea Antifeedant from the Abundant Birchbark Triterpene Betulin", <u>Journal of Agricultural and Food Chemistry</u> , 38, (Feb. 1990), pp. 493-496	
		MANEZ, S., et al., "Effect of selected triterpenoids on chronic dermal inflammation", <u>European Journal of Pharmacology</u> , 334 (1), (Sep. 3, 1997), pp. 103-105	
		MCHUGH, MARK.J., <u>Supercritical Fluid Science and Technology, ACS Symposium Series: 406</u> , K.P. Johnston, et al., editor, American Chemical Society, (1989), pp. 1-550	
		MCHUGH, M., et al., <u>Supercritical Fluid Extraction-Principals and Practice, Second Edition</u> , M.A. McHugh, et al., editors, Butterworth-Heinemann, (1994), pp. 1-512	
		MILES, D.H., et al., "Boll Weevil Antifeedants from Elecharis dulcis Trin.", <u>Journal of Agricultural and Food Chemistry</u> , 42, (1994), pp. 1561-1562	
		NOWAK, G.A., "Cosmetic and medicinal properties of the birch", <u>American Perfumer and Cosmetics</u> , 81, (Nov. 1966), pp. 37-39	
		O'CONNELL, M.M., et al., "Betulin and Lupeol in Bark from Four White-Barked Birches", <u>Phytochemistry</u> , 27 (7), (1988), pp. 2175-2176	
		OHARA, S., et al., "Utilization of Wood Extractives I. Extractives from the bark of Betula platyphylla Sukatchev var. japonica Hara", <u>Mokuzai Gakkaishi</u> , 32 (4), (1986), pp. 266-273	
		PEARCE, R.B., "Suberin in the sapwood of oak (<i>Quercus robur L.</i>) its composition from a compartmentalization barrier and its occurrence in tyloses in undecayed wood", <u>Physiological Plant Pathology</u> , 24, (1984), pp. 71-81	
		PISHA, E., "Discovery of Betulinic Acid as a Selective Inhibitor of Human Melanoma that Functions by Induction of Apoptosis", <u>Nature Medicine</u> , 1 (10), (Oct. 1995), pp. 1046-1051	
		PIZZI, A., "Wood/Bark Extracts as Adhesives and Preservatives", <u>Forest Products Biotechnology, Chapter 11</u> , Dr. Alan Bruce, et al., editor, Taylor & Francis, Ltd., London, (1998), pp. 167-182	
		QUERE, L., et al., "Triterpenes as Potential Dimerization Inhibitors of HIV-1 Protease", <u>Biochemical and Biophysical Research Communications</u> , 227, (1996), pp. 484-488	
		RECIO, M.D., et al., "Investigation on the Steroidal Anti-Inflammatory Activity of	

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DATE CONSIDERED

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DP		Triterpenoids from <i>Diospyros leucomelas</i> ", <i>Planta Medica</i> , 61, (Feb. 1995), pp. 9-12	
		ROBERTS, M.T., et al., "Birch (bark)", <i>Bookbinding and the Conservation of Books - A Dictionary of Descriptive Terminology (Website)</i> , http://sul-server-2.stanford.edu/don/dt/dt0328.html , (June 7, 2000) 2 p.	
		SANZ, V., et al., "Synthesis of Ambrettolide from Phloionolic Acid", <i>Journal of the Chemical Society Perkin Transactions I</i> , (7), (July 1982), pp. 1837-1839	
		SCHMIDT, M.L., et al., "Betulinic acid induces apoptosis in human neuroblastoma cell lines", <i>European Journal of Cancer</i> , 33 (12), (Oct. 1997), pp. 2007-2010	
		SCHWEIZER, P., et al., "Induction of resistance in barley against Erysiphe graminis f.sp. hordei by free cutin monomers", <i>Physiological and Molecular Plant Pathology</i> , 49, (1996), pp. 103-120	
		SEAONE, E., "Synthesis of Ambrettolide from Phloionolic Acid" <i>Journal of Chem. Soc. Perkin Trans.</i> , (1982), pp. 1837-1839	
		SEOANE, E., et al., "Total Synthesis and Stereochemistry of Phloionolic Acids", <i>Anales De Quimica</i> , 73, (1977), pp. 1336-1339	
		SOLER, F., et al., "Betulinic acid derivatives: a new class of specific inhibitors of human immunodeficiency virus type 1 entry", <i>Journal of Medicinal Chemistry</i> , 39 (5), (Mar. 1, 1996), pp. 1069-1083	
		TAYLOR, L.T., "Properties of Supercritical Fluids", <i>Supercritical Fluid Extraction</i> , Chapter 2, John Wiley & Sons, New York, (1996), pp. 7-27	
		VILEGAS, J.H., et al., "Extraction of Low-polarity Compounds with Emphasis on Coumarin and Kaurenoic Acid from <i>Mikania glomerata</i> (Guaco) Leaves", <i>Phytochem. Anal.</i> , 8, Abstract Obtained from CAPLUS, Document No. 127:316461, (1997), pp. 266-270	
		WANG, J., et al., "Antibechic and expectorant constituents of <i>Huashupi</i> (<i>Betulae cortex</i>)", <i>Zhongguo Yaoxue Zazhi</i> , 29 (5), (1994), pp. 268-271	
		YASUKAWA, K., et al., "Sterol and triterpene derivatives from plants inhibit the effects of a tumor promoter, and sitosterol and betulinic acid inhibit tumor formation in mouse skin two-stage carcinogenesis", <i>Oncology</i> , 48 (1), (1991), pp. 72-76	

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